

WHAT IS CLAIMED IS:

CLAIMS

1. A method for mass-customizing and assembling multi-component articles for a consumer, said method comprising the steps of:
 - choosing a multiple component article to be assembled;
 - selecting constituent components adaptable to said multi-component article, wherein said constituent component is attachable to the three-dimensional structure of said multi-component article;
 - searching a database wherein said database is in part a catalogue of said constituent components that permits a consumer to choose one or more desired constituent components that are compatible with a consumer's previously selected components; and
 - combining the attributes of said constituent components to determine performance attributes of multi-component combinations.
2. The method of claim 1 further comprising the steps of:
 - using the results from said database search to virtually assemble said chosen multi-component article and said chosen constituent component combinations into viewable representation of said multi-component article displaying said one or more chosen constituent components.
3. The method of claim 1 further comprising the steps of:
 - storing in a computer network, data relating to:
 - assessing said consumer's satisfaction with one or more of said constituent components or combinations thereof;
 - transmitting said data to specified role players of said multi-component article's supply chain, so as to coordinate role player activity within and across each tier of said supply chain; and
 - obtaining said constituent components from role players in an appropriate supply chain; and

manufacturing and assembling said multi-component article;
coordinating the manufacture, shipping and actual delivery of said constituent components to a multi-component article assembling facility.

3. The method of claim 1, wherein the step of choosing the multiple-components article to be assembled is undertaken by the consumer.
4. The method of claim 1, wherein the step of choosing the multiple-components article to be assembled is undertaken as a result of consumer responses to inquiries.
5. The method of claim 1, wherein the step of searching the database compatible components are narrowed to include only further components which are compatible with components already selected.
6. The method of claim 1, wherein said multi-component article is a vehicle.
7. The method of claim 6, wherein said vehicle is selected from the group consisting of automobiles, trucks, boats, ships, and air-borne vehicles.
8. The method of claim 1, wherein said multi-component article is selected from the group consisting of automobiles, trucks, boats, ships, and vehicles capable of air travel.
9. The method of claim 1, wherein said multi-component article is either new or previously owned.
10. The method of claim 5, wherein said constituent component is brand new, or previously owned.
11. The method of claim 2, wherein said virtual representation and said virtual map recreate the structural features of a consumer's presently owned multi-component article; and
said consumer modifies at least one feature of said presently owned multi-component article by choosing from the database one or more constituent components to create said virtual image, so as to assess the desirability of said modification.
12. The method of claim 1, wherein said database stores data comprising:
a variety of multi-component article customization and production features that define the appearance, structural nature, performance, manufacturing and consumer costs, of any of said constituent components; and further, wherein said data includes features of said constituent components that may be relevant to said consumer such as,
physical compatibility and operability when combined with a particular multi-component article;

physical compatibility and operability when combined with other constituent components;
physical compatibility and operability under specified conditions of use;
specific year and model of the multi-component article;
physical durability of said constituent component;
projected depreciated value of the individual constituent components after varying periods of use;
projected depreciated value of the multi-component article as a whole;
choices of materials, colors, styling modifications, maintenance and repair services, environmental hazard indices, and cost and price information.

13. The method claim 1, wherein the multi-component article is a system comprised of sub-systems.
14. The method of claim 12, wherein the multi-component system is an automobile, and said sub-systems include but are not limited to, an engine, a chassis, a steering sub-system, a braking sub-system and an electronic entertainment/communication/tracking sub-system.
15. The method of claim 14, wherein a sub-system may be replaced in its entirety, or in part by replacing one or more of the sub-system's constituent components.
16. The method of claim 1, wherein the said performance attributes include weight.
17. The method of claim 1, wherein the said performance attributes include acceleration.
18. The method of claim 1, wherein the said performance attributes include braking.
19. The method of claim 1, wherein the said performance attributes include handling.
20. A method for mass-customizing and assembling automobiles, said method comprising the steps of:
 - selecting constituent components adaptable to said automobile;
 - searching a database wherein said database is in part a catalog of said constituent components that permits a consumer to choose one or more desired constituent components that are compatible with a consumer's previously selected components; and

combining the attribute of said constituent components to determine performance attributes of multi-component combinations.

21. The method of claim 20, further comprising the step of:

storing in a computer network, data relating to:

assessment of said consumer's satisfaction with one or more of said constituent components or combinations thereof;

obtaining said constituent components from role players in an automobile manufacturing supply chain;

manufacturing and assembling said automobile;

transmitting said data to specified role players of said supply chain, so as to coordinate role player activity within and across each tier of said supply chain; and

coordinating the manufacture, shipping and actual delivery of said constituent components to an automobile assembling facility.

22. The method of claim 21, wherein said database stores data comprising:

choices of automobile customization and production features;

wherein said data relates to appearance, structural nature, performance or cost of any of said features; and

wherein said data defines said automobile features such as,

platform, manufacturing panel technology, choice of powertrain, year of the car, projected depreciated value of the individual parts, projected depreciated value of the car as a whole, choice of interior materials, choice of colors, choice of styling modifications, choice of electronic equipment and services, emission values, electronic footprint of engine/exhaust note, intended, and cost and price information.

23. The method of claim 21, wherein the database further comprises a means to determine the present market demand for said automobile, said demand being determined by comparing said data with a current supply/demand curves for automobiles having characteristics similar to said automobile.

24. The method of claim 21, wherein the computer network transmits said consumer choice data to all role players at all tiers of the supply chain permitting all role players to monitor and update, their supply-related activities and their demand-related activities, and to transmit said updated information to all other role players at all tiers of said supply chain.
25. The method of claim 21, wherein all supply chain participants use database management software that recursively and continuously tracks consumer preferences and trends, and adjusts its inventories, availability, and costs of constituent components, and length of delays in shipping and final delivery times to another participant of said supply chain.
26. The method of claim 21, wherein each role player maximizes its demand-related activities by tracking consumer choices, and adjusting inventories accordingly.
27. The method of claim 21, wherein said automobile components may perform at least one function relating to the aesthetic, structural or performance nature of said customized automobile.
28. The method of claim 21, wherein said component database stores and recursively analyzes information relating to the appearance and/or the performance of said constituent components, the costs of purchasing and installing said components, and the availability of said constituent components so as to provide updated delivery dates of an assembled or modified automobile to a consumer.
29. The method of claim 21, wherein said computer network further performs the additional steps of:
- receiving said consumer's personal financial information and comparing said financial information with costs of producing and assembling said automobile; and
 - creating a personalized financing scheme to permit said consumer to purchase modifications of an automobile, or said customized automobile.